TOWN OF ALTAVISTA

PUBLIC TRANSPORTATION FEASIBILITY STUDY FINAL REPORT

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DRAFT FINAL REPORT

Prepared in cooperation with the Virginia Department of Rail and Public Transportation.

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Authored by HNTB Corporation with cooperation from staff from the Town of Altavista and funding from the Virginia Department of Rail and Public Transportation.

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TOWN OF ALTAVISTA PUBLIC TRANSPORTATION FEASIBILITY STUDY

INTRODUCTION

The Town of Altavista is a rural community located approximately 26 miles South of Lynchburg, Virginia and 43 miles North of Danville, Virginia at the junction of U.S. Route 29 and Virginia Primary Route 43. The U.S. Census indicated that the 2000 population was 3,425 residents. The town is located within Campbell County and is home to many of the major employers within the County including Abbott Laboratories, BGF Industries Inc., Moore's Electrical, and Schrader Bridgeport International. Major retailers include Wal-Mart and Food Lion. A vibrant retail community is also located in the downtown central business area. In the fall the town anticipates initiating a Downtown Revitalization Project which will make improvements to the street areas within the central business district.

The Town envisions that a public transportation system would provide mobility to the town's elderly population, increase opportunities for shopping in the downtown business area, increase access to medical care and social services, provide access to the local community college, provide access to recreation opportunities such as the YMCA, and serve as a stimulus to economic development within the town, surrounding rural towns, and the county. The Town of Altavista has requested the Virginia Department of Rail and Public Transportation (DRPT) to assess the feasibility of starting public transportation service in the town.

Four primary purposes public transportation serves are:

- to increase access to transportation to a larger segment of the population
- to offer transportation at a lower cost
- to act as a stimulus for economic development
- to mitigate congestion.

These purposes were used as criteria to evaluate public transportation needs of the Town.

IDENTIFICATION OF TRANSIT NEEDS

The transit needs of Town of Altavista have been identified using the following information:

1. Local stakeholder input from field visits, interviews and telephone conversations
2. Identification of key activity centers within Town of Altavista based on field visits and discussions with town officials
3. Demographic analysis based on census information (population, density, number of households, age distribution, and households with no automobile available).

Background

The Town of Altavista hosts many of the major employers in the area including Ross-Abbott Laboratories, Timken, BGF Industries Inc., Moore's Electrical, and Wal-Mart, most of which are located in the outer fringes of the town. These account for more than 15 percent of the total land area of the town. The downtown or Central Business District (CBD) is small with about 25 businesses, primarily retail oriented, including banks, grocery stores, restaurants, and medical services.

Although the Town of Altavista is an important employment center, there are a significant number of residents who work outside of the city. According to the 2000 Census, at least 43 percent of the 1,429 workers living in the Town of Altavista work outside of Campbell County (See Table 1).

As shown in Table 2, the primary mode of commute is driving in personal automobile (86.6 percent). However, the Census reports that 15 percent of households have no vehicle available.

Table 1: Place of Work – Town of Altavista

	Population	%
Total:	1,429	
Worked in state of residence:	1,429	100.0
Worked in county of residence	814	57.0
Worked outside county of residence	615	43.0
Worked outside state of residence	0	0.0

Source: Census 2000

Table 2. Journey to Work – Mode – Town of Altavista

	Population	%
Total:	1,429	
Car, truck, or van:	1,336	93.5
Drove alone	1,237	
Carpooled	99	
Walked	50	3.5
Other means	26	1.8
Worked at home	17	1.2

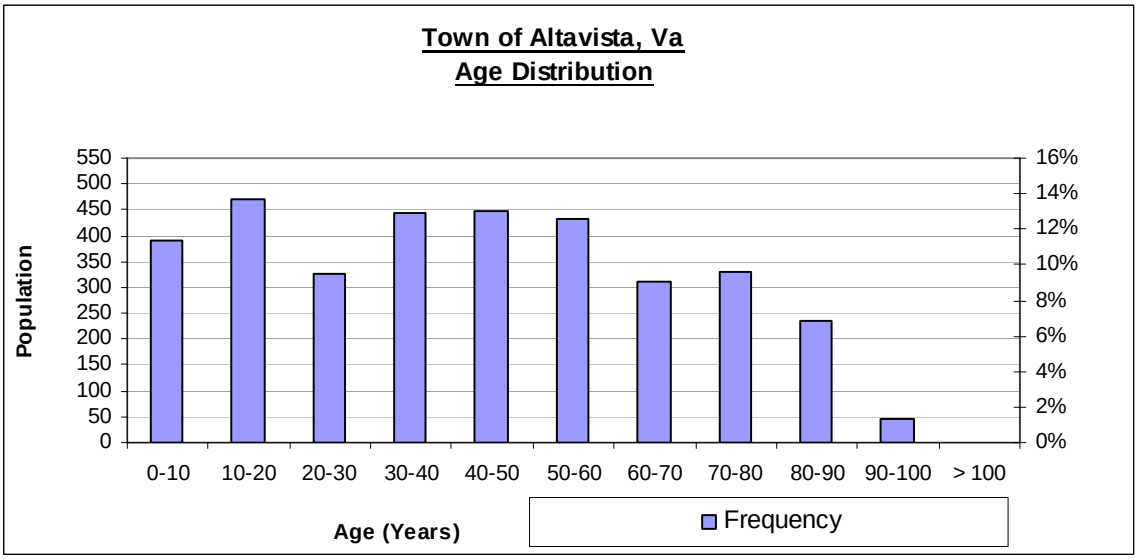
Source: Census 2000

Needs Assessment

Discussions with stakeholders revealed that most people who work in the Town of Altavista reside elsewhere; in Campbell County and the adjacent Pittsylvania County. Workers are content with their current commute since work sites provide ample parking. There is also abundant free parking on the street in the downtown area. Moreover, there is little or no congestion in the town to create any necessity for commuters to carpool or use transit. However, one factor motivating people to look for transportation options is the rising price of gasoline.

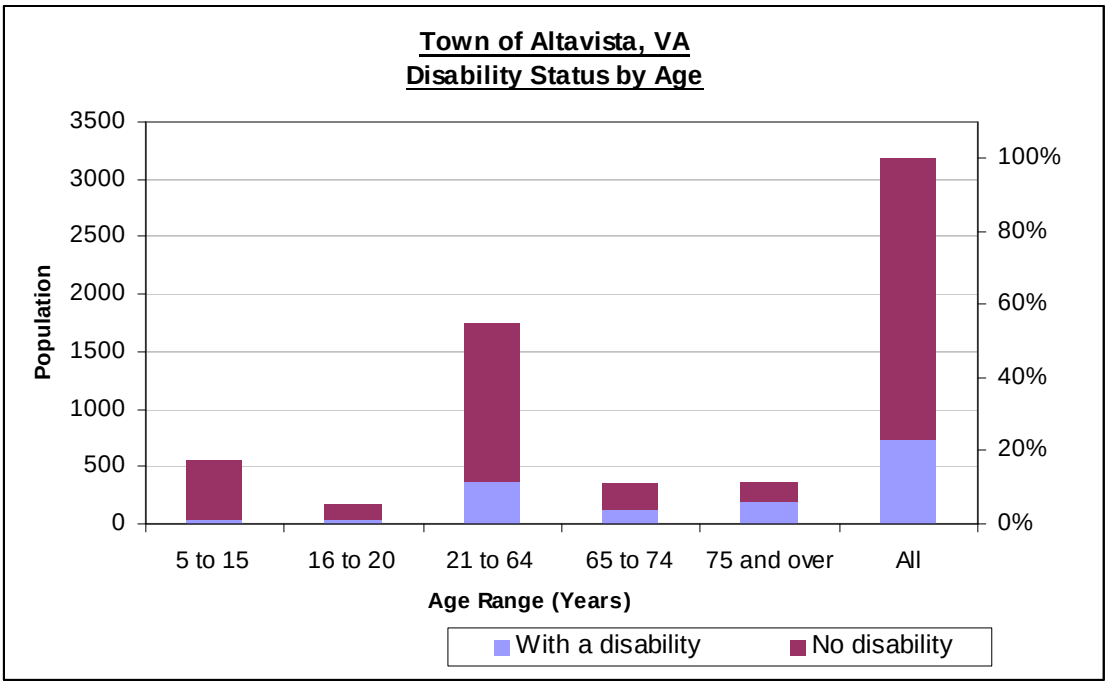
Based on interviews with stakeholders, there is a strong need for transportation assistance for the elderly and the disabled. The senior population (over age 65) accounts for 22 percent of the population of the Town of Altavista (See Figure 1) and about 23 percent of the population are disabled (See Figure 2). Together, seniors and the disabled account for approximately 32 percent of the population.

Figure 1. Age Distribution



Source: Census 2000

Figure 2. Disability Status by Age Distribution



Source: Census 2000

Discussions with seniors and other community stakeholders led to the identification of key locations and activity centers, listed below, that could be served by public transportation.

- The **YMCA** is an important community center in the Town of Altavista that caters community needs like child care, socialization and art. The YMCA has about 3,000 members, 500 of which are seniors. Currently, there are four buses that transport about 250 to 300 school children from/to the YMCA. But, there are no services provided for transporting seniors. Seniors typically drive themselves to the YMCA. With additional transportation options, it is possible that more senior citizens could use the YMCA facilities and services.

- The **Senior Center** has 25 members with 12 to 15 people attending on a daily basis. The senior center also hosts monthly activities such as potlucks, fairs, and bingo competitions. Most of these activities are hosted at different locations in and around the town. The Campbell County Recreation Center provides a van for transportation during these activities. However, the organizer of the senior center feels that lack of proper transportation has led to a decline in membership.

- The **Sheltered Workshop** is a non-profit community service that caters those who can't work in competitive employment situations. Participants of this program attend the workshop 5 days per week. The Sheltered Workshop building has the capacity to host 45 participants, but at present, there are only about 9 clients using these services. The workshop has two vans, subsidized by the Department of Rehabilitation Services, to transport clients to and from Campbell County and

Pittsylvania County. Participation in the workshop is currently limited by transportation capacity.

- The **Central Business District (CBD)** is also cited by seniors as an important activity centers to be serviced by transit, because it has many retail stores and banks. The food store, farmer market, medical center and other businesses are located in the vicinity of the CBD. The Town of Altavista was designated as a Main Street Town by the Commonwealth of Virginia. Pursuing this, the Town of Altavista has developed a revitalization plan for the downtown area. Altavista On Track is leading this effort since 2003. This plan focuses on empowering the CBD and supporting local businesses in the downtown area. The program has $100,000 of local funding to invest on the CBD revitalization and $100,000 outside of the CBD. Improving connectivity to the CBD will encourage more business activity.

- Neighboring locations mentioned by stakeholders as needing connectivity to the town include the town of **Hurt, Gladys,** and **Lynch Station**. Connectivity to these towns is seen as an avenue to promote economic development and business opportunities in the Town of Altavista.

- There is strong need to connect the Town of Altavista to **Lynchburg.** Residents often travel to Lynchburg for specialized medical/dental services, education, employment, entertainment (movies, restaurant, etc.) and to obtain wider variety of services and goods. The closest airport to the Town of Altavista is also at Lynchburg.

Comparable Systems

Other small towns in Virginia have successfully implemented public transportation service with good ridership numbers. Table 3 compares several demographic factors. Altavista is demographically similar to these other towns, suggesting Altavista could expect similar success if it chooses to begin transit service.

Table 3: Demographic Comparison with Other Small Towns Operating Transit Service

	Altavista	Blackstone	South Hill
Type of Service	None at present	Deviated fixed route	Demand responsive
Population	3,425	3,675	4,403
Over 65	21.8%	21.3%	19.9%
White	74.2%	50.2%	58.4%
In poverty	13.5%	26.5%	18.8%
Disabled	23.1%	20.7%	26.1%
Renter occupied housing units	33.7%	38.3%	41.6%
Median household income	$31,818	$27,566	$31,078
Monthly ridership	Not applicable	800–1500	600

Sources: Census 2000, Blackstone Area Bus System, Lake Area Bus

Conclusions

Based on the needs assessment, the following conclusions can be made.

- With nearly a third of its population as elderly or disabled, the Town of Altavista would benefit from public transportation to broaden access to transportation to enable people to go to medical appointments, make shopping trips, and generally have greater independent mobility.

- Given the current instability in gasoline prices, public transportation would benefit people in the Town of Altavista for whom gas prices have become a hardship.

- The Town of Altavista is engaged in a process to revitalize its retail core. This process would be supported by public transportation to improve access to and the attractiveness of the central business district.

- Towns of similar size and demographic character have successfully implemented public transportation service.

- Traffic congestion is not currently an issue in the Town of Altavista. Therefore, public transportation would not be needed to mitigate congestion.

This set of characteristics helped to assess transit service recommendations for the Town.

TRANSIT SERVICE ALTERNATIVES

This section gives an overview of service characteristics such as service area, types of service, frequency, and duration. It then outlines and assesses three transit service alternatives considered for this feasibility study.

Service Area

In this feasibility study two alternative service area boundaries have been considered.

- Town of Altavista only
- Town of Altavista with adjacent locations such us Hurt and Lynch Station.

The first alternative provides transit service limited to the Town of Altavista, including the Wal-Mart site. This alternative concentrates the service to serve the people, businesses, and major employment centers of the town.

The second alternative provides transit service the Town of Altavista and the adjacent communities of Hurt and Lynch Station. The Town of Hurt is located in Pittsylvania County about 2.4 miles to the southwest of Altavista. Lynch Station is located in

Campbell County about 2.3 miles north of Altavista. People from Hurt and Lynch Station would benefit from improved access to businesses and employment in Altavista.

Types of Service

Three types of transit service are being considered in this study: fixed route, deviated fixed route, and demand-responsive service.

1. Fixed Route
   This type of service operates along designated routes with specific stops according to a fixed schedule. Fixed route service is offered primarily in urban areas in Virginia. Examples of fixed route bus service near Altavista would be the transit services provided by Greater Lynchburg Transit Company, Danville Transit System, and Valley Metro in Roanoke.

2. Deviated Fixed Route
   This type of service is essentially fixed route service with the flexibility to go off route to provide occasional pick-ups and drop-offs. If there are no requests for deviation, the service operates as a traditional fixed route, fixed schedule service. Requests for deviations can be handled in several ways. For pick-ups off the route, riders typically call the transit office in advance with their request for deviation. For drop-offs located off the route, riders may call the transit office in advance or ask the driver upon boarding. Deviated fixed route service is particularly appropriate to rural areas. Examples of deviated fixed route service would be Alleghany Highlands Mountain Express and Blackstone Area Bus System.

3. Demand-Responsive
   This type of service is provided purely based on requests by individual passengers from one location to another, either door-to-door, with the driver assisting the passenger into and out of the vehicle, or curb-to-curb, where the passenger is picked up and dropped off in front of their house. Like deviated fixed route service, demand-responsive service is appropriate for rural areas or places with significant elderly or disabled populations. Demand-responsive service is offered by Lake Area Bus in the South Hill area, CORTRAN in Roanoke County, and Greene County Transit.

Service Frequency and Duration

A wide range of service frequencies and durations are possible with fixed route and deviated fixed route service. Service frequency is not applicable to demand-responsive service, as trips are made upon request as opposed to following a fixed schedule. Service duration is applicable to demand-responsive service.

Service duration refers to the days of the week and hours of the day that public transportation service is offered. In urban areas or areas serving university campuses, for example, service duration can be seven days a week including late night service. For rural areas, service duration is often Monday through Friday during the day (9:00 a.m. to 5:00 p.m., for example).

Service frequency refers to how often a bus passes along a fixed route. In rural applications, service frequencies as great as one bus per hour are typical. If demand is lower, then service frequencies can be reduced to a few trips per day.

Alternatives

Three alternatives have been crafted for further consideration in this feasibility study. These alternatives are based on the identified transportation needs and the characteristics of the Altavista community. The alternatives combine the service area, types of service, and service frequency and duration as described above.

Option A. Deviated Fixed Route with Frequent Service

Under Option A, the proposed fixed route would cover most of the activity centers located within the Town. Specifically served would be:

- Central Business District
- Abbot Laboratories
- Senior Center
- YMCA
- Sheltered Workshop
- Public Library
- Elementary School
- Wal-Mart Shopping Center
- Food Lion Shopping Center
- Schrader-Bridgeport
- Community College / Dialysis Clinic
- Altavista Medical Center

The length of this fixed route is about 8.4 miles, with a round trip taking about 50 minutes, assuming a conservative operating speed of 10 miles per hour. Hourly service would be provided, using one vehicle, for 8 hours a day on weekdays.

The service would have on-demand route deviations up to approximately 3/4 miles from the proposed fixed route to cater the needs of riders who would have difficulty walking to a bus stop. The route deviations would allow covering virtually the entire Town limits. The trip time without deviations is short enough to allow deviations to occur while maintaining the hourly service frequency. Deviations would be available for qualified riders who are eligible on account of age or disability for demand responsive service.

The proposed route, shown in Figure 3, would begin on 7th Street at the Farmers Market site. The Farmers Market site would serve as a good location for the vehicle to layover between trips as it is Town-owned property. The route would continue on 7th Street. towards Lola Avenue. It would turn left at Lola Avenue and continue until Frazier Road. It would turn right heading east to Lynch Mill Road. Then it would turn

right heading south until Clarion Road. It would turn left onto Clarion Road and continue until reaching the Wal-Mart on Dearing Ford Road. It would return along Clarion Road to Lynch Mill Road. Then it would turn left and continue to Main Street. It would turn left at Main Street to serve Abbot Laboratories. It would return west along Main Street, diverting to 5th Street between Amherst Avenue and Pittsylvania Avenue, until reaching Bedford Avenue. It would turn right on Bedford Avenue and again at 7th Street to return to the Farmers Market Site.

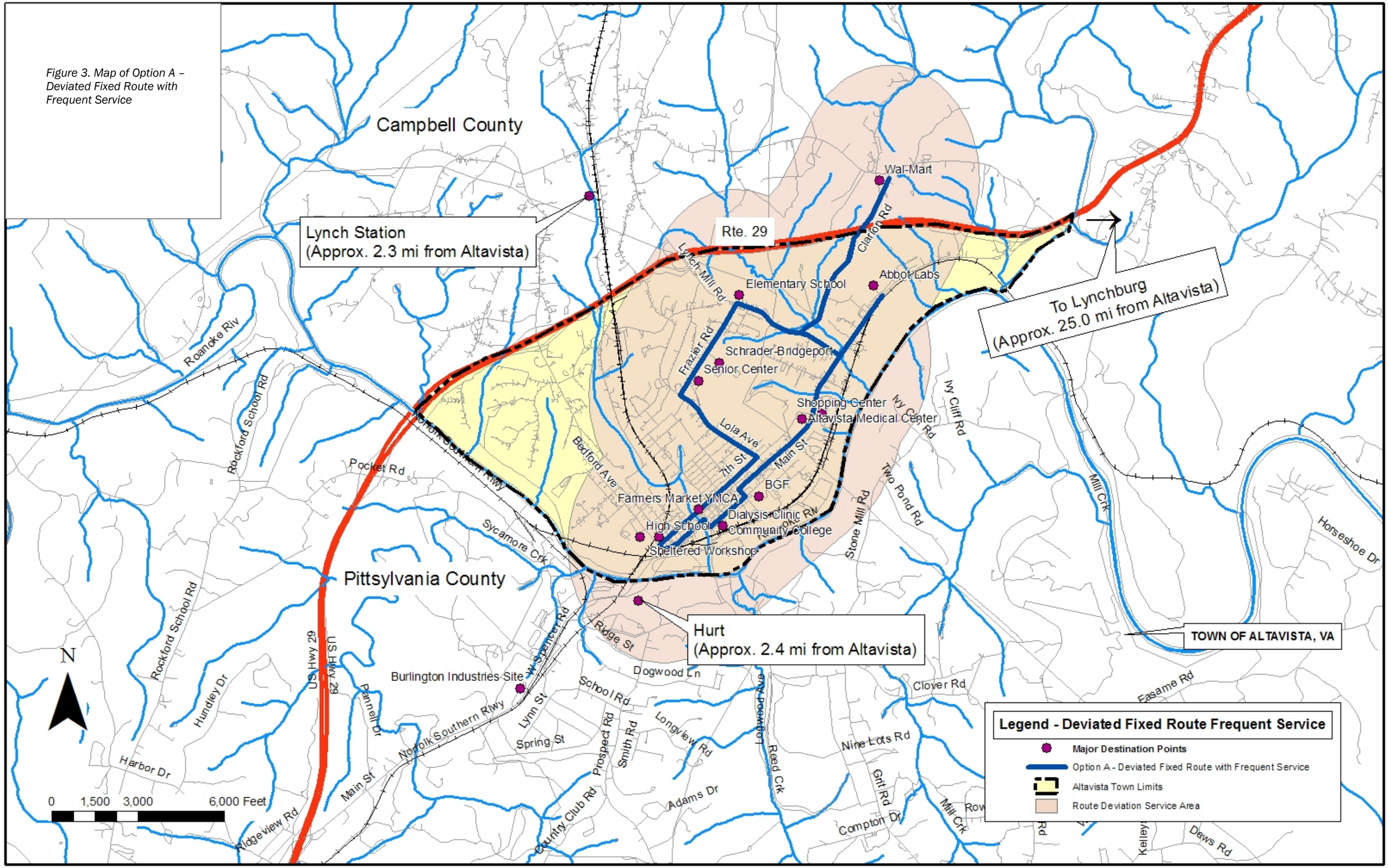
Alternatively, the route could be operated as two branches. The first branch would run from the Farmers Market site to Wal-Mart via Lola Avenue and Frazier Road and return to the Farmers Market site by the same path. The second branch would run from the Farmers Market site to Wal-Mart via Main Street and return to the Farmers Market site by the same path. This branched approach would shorten in-vehicle times for some riders compared to the looped approach described above.

Figure 3 shows the proposed fixed route. This route is conceptual and would be adjusted as part of the implementation phase.

The pros and cons of this option are as follows:

Advantages	Disadvantages
• Fixed schedules may encourage people to use public transportation as they will know when the bus will come. • Bus stops placed near key destinations will serve travelers well. • Fixed schedules are easy to implement and operate. • The option of allowing deviation of the fixed route will increase ridership and patronage among seniors and the disabled who may most benefit from improved transportation options. • The service connects residential areas with the CBD and other major activity centers. • The relatively short route length allows for frequent service.	• Service area is limited to the Town limits. • Too many route deviations may impact schedules. • Riders may be hesitant to take transit because schedules and routing may be perceived as inflexible. • Looped routes can result in long return trips for short outbound trips and vice versa. • The Town of Altavista has low population and employment density, which makes it more difficult to serve with fixed route service. Altavista does not meet DRPT's levels of development criteria for fixed route bus service.

Figure 3. Map of Option A – Deviated Fixed Route with Frequent Service



Option B. Deviated Fixed Route with Infrequent Service

Under Option B, the fixed route would cover most of the activity centers located within the district limits and will also connect Altavista with the neighboring communities of Hurt and Lynch Station. Specifically served would be:

- Central Business District
- Abbot Laboratories
- Senior Center
- YMCA
- Sheltered Workshop
- Public Library
- Elementary School
- Wal-Mart Shopping Center
- Food Lion Shopping Center
- Schrader-Bridgeport
- Town of Hurt
- Burlington Industries Site
- Lynch Station
- High School
- Altavista Medical Center
- Community College / Dialysis Clinic
- Motels along Business Rt 29

The proposed route, shown in Figure 4, consists of three loops with a total length of about 22 miles. Each loop will connect the CBD with different areas. The first loop would serve the eastern part of the Town out to Dearing Ford Road where the Wal-Mart is located. The second loop would go through the Town of Hurt. The third loop would serve the northwest side of the Town and Lynch Station. Service would be provided every three hours, using one vehicle, for 9 hours a day on weekdays. Each loop would be served three times per day.

The service would have on-demand route deviations up to approximately 3/4 miles from the proposed fixed route to cater the needs of riders who would have difficulty walking to a bus stop. The route deviations would allow covering virtually the entire Town limits. The trip time without deviations is short enough to allow deviations to occur while maintaining the service frequency. Deviations would be available for qualified riders who are eligible on account of age or disability for demand responsive service.

The routing is presented in Figure 4 and is described as follows:

1. The first loop would begin on 7th Street at the Farmers Market site, and continue on 7th Street towards Lola Avenue. It would turn left at Lola Avenue and continue until Frazier Road. It would turn right heading east until Lynch Mill Road. Then it would turn right heading south until Clarion Road. It would turn left and continue until Dearing Ford Road. Then it would turn right and continue until joining Main Street. It would continue on Main Street until Bedford Avenue. Finally, it would turn right on Bedford Avenue and again right on 7th Street until reaching the departure point at the Farmers Market site. (8.6 miles, 52 minutes)

2. The second loop would begin at the Farmers Market site and proceed to Main Street. It would continue west on Main Street to serve the Burlington

Industries Site (if in use). It would return east on Main Street and turn right on W Hurt Road and again right on Tanyard Road. It would turn right on School Road and then right on Lynn Street. It would turn left on Spring Street to return to School Road. It would turn right on School Road and left on Prospect Road. Then it would turn right on E Hurt Road and left on Ricky van Shelton Dr (Pittsylvania Avenue). After entering Altavista, the route would turn left on Main Street and continue to Bedford Avenue. It would turn right on Bedford Avenue and again right on 7th Street to return to the Farmers Market site. (6.4 miles, 38 minutes)

3. The third loop would begin at the Farmers Market site and continue on 7th Street toward Bedford Avenue. It would turn north on Bedford Avenue to Dearing Ford Road. It would proceed east on Dearing Ford Road through Lynch Mill to Lynch Mill Road. It would turn south on Lynch Mill Road and turn right on Frazier Road. It would turn left on Lola Avenue and then right on 7th Street (or Main Street) to return to the Farmers Market. (7.2 miles, 43 minutes)

The pros and cons of this option are as follows:

Advantages	Disadvantages
• Fixed schedules may encourage people to use public transportation as they will know when the bus will come. • Bus stops placed near key destinations will serve travelers well. • Fixed schedules are easy to implement and operate. • The option of allowing deviation of the fixed route will increase ridership and patronage among seniors and the disabled who may most benefit from improved transportation options. • The service connects residential areas with the CBD and other major activity centers. • Connecting to Hurt and Lynch Station would support economic development in Altavista. • The relatively short route length allows for frequent service.	• Too many route deviations may impact schedules. • Riders may be hesitant to take transit because schedules and routing may be perceived as inflexible. • Riders may be hesitant to use a service that may serve an area only once every three hours. • The Town of Altavista and surrounding area has low population and employment density, which makes it more difficult to serve with fixed route service. Altavista does not meet DRPT's levels of development criteria for fixed route bus service. • Duration of individual loop trips would result in infrequent service. • Looped routes can result in long return trips for short outbound trips and vice versa.

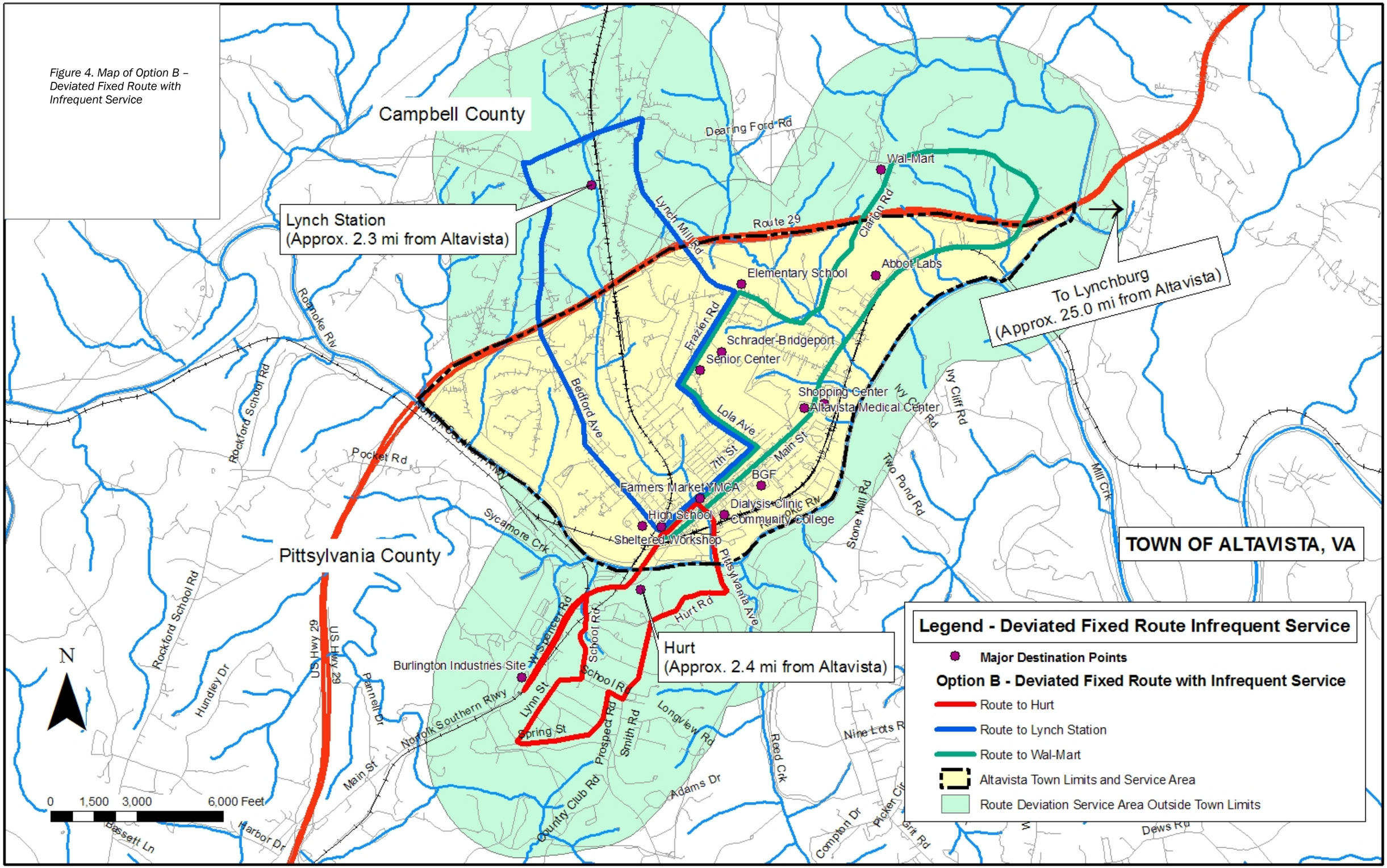


Figure 4. Map of Option B – Deviated Fixed Route with Infrequent Service

Option C. Demand-Responsive Service Only

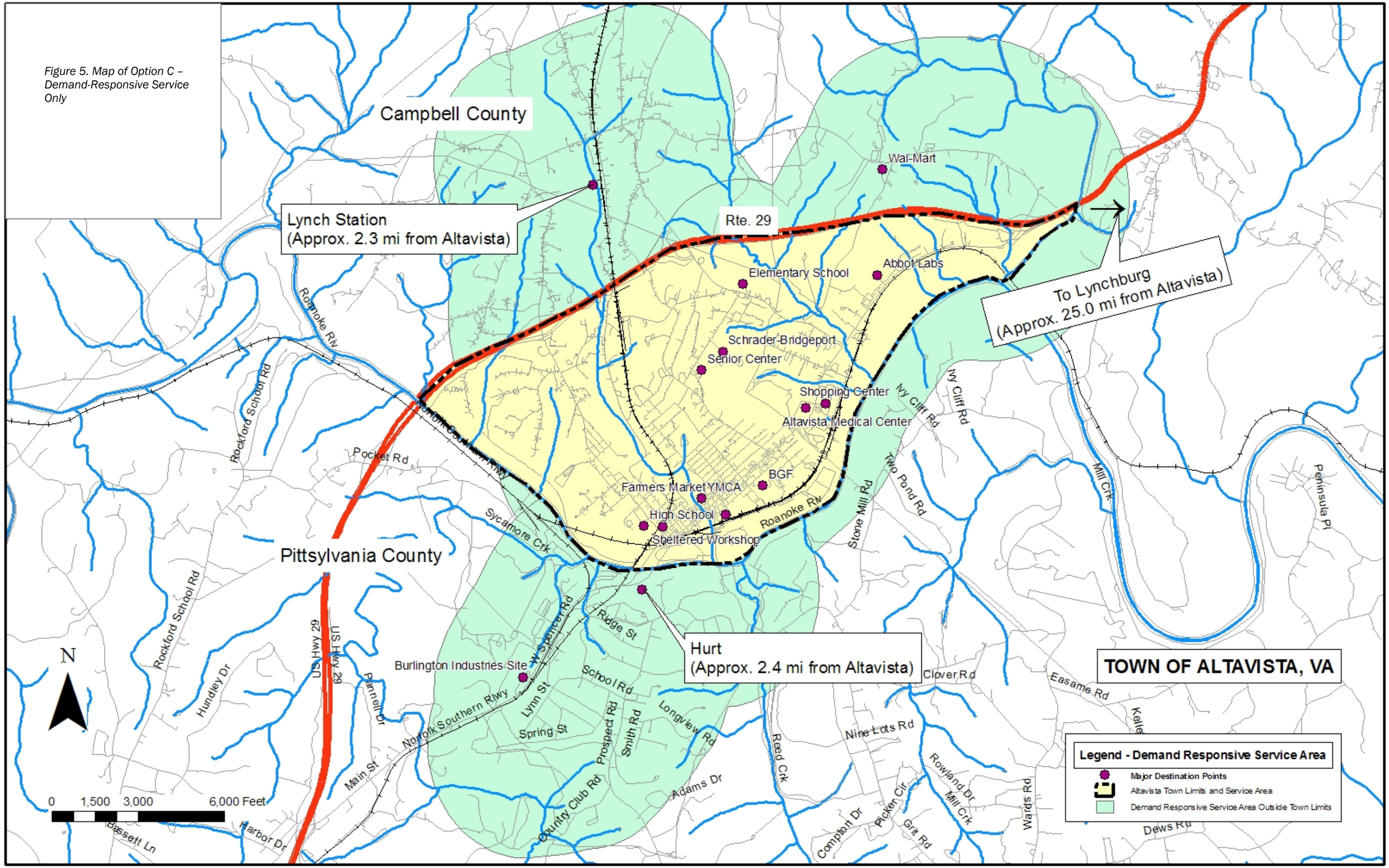
This proposed demand-responsive option would cover the entire Town of Altavista and adjacent communities. It would cover up to Dearing Ford Road north of Altavista to connect with the Wal-Mart shopping center and with Lynch Station, and it would cover the Town of Hurt south of Altavista.

Rides would be scheduled by phone or on-line and would need to be scheduled typically one day in advance. The public transportation service would be in operation on weekdays for 8 hours a day. Figure 5 shows the coverage area for demand-responsive service.

The pros and cons of this option are as follows:

Advantages	Disadvantages
• Demand responsive service may end up being less expensive to operate overall, compared to a fixed route service with very low ridership, because the service would operate only when a passenger requests a ride • Riders can set their own schedules for travel, as compared to fixed route service, which comes only at prescribed times. • Door-to-door or curb-to-curb service is more accessible and convenient than fixed route service. • Demand-responsive service may be more appropriate for lower population and lower density communities such as Altavista.	• Demand-responsive service is more expensive in terms of fare than fixed route • Demand-responsive service has higher operating costs associated with dispatching requirements. • Riders would need to schedule travel in advance, which may be less convenient than having a fixed schedule. • Demand-responsive service may be more strongly perceived as exclusively for the elderly and disabled rather than for everyone, compared to fixed route service.

Figure 5. Map of Option C – Demand-Responsive Service Only



No Service Alternative

Following the DRPT's Transit Service Design Guidelines, Altavista does not meet the minimum development levels that are supportive of fixed bus route, as shown in Table 4.

Table 4: DRPT Transit Service Guidelines for Fixed Route Bus Service

Measure	DRPT Guideline	Altavista Development
Population density	2,500–4,000 persons/square mile	687 persons/square mile
Employment density	4–5 jobs/acre	< 1 job/acre
Residential density	4–5 housing units/acre	0.52 housing units/acre

Not providing public transportation service would not meet the unmet transportation needs of the community, such as transportation for seniors and the disabled. Nor would it support the economic development goals of the Town.

Alternatives to a public transportation service that could be considered are:

- User-side subsidy, where transportation could be provided by a private party such as a taxi (of which there is no service at present in Altavista), and the rider is reimbursed through a public program.

- Ride matching service, where the Town or another agency could coordinate carpools for people who need transportation.

- Investment in pedestrian and bicycle infrastructure, such as sidewalks, bike trails, benches, and bike racks to encourage walking and biking.

- Employer-sponsored carpooling and vanpooling programs, in which employers help arrange carpools, provide vans for vanpooling, or incentivize carpooling through gifts or prizes.

Table 5 compares the three service alternatives against one another following several evaluation criteria. This evaluation is largely qualitative.

Table 5: Service Alternative Comparison

Service Alternative	Evaluation Criteria						
	Fare	Coverage	Ridership	Trip Duration	Reliability	Convenience	Operational Complexity
A. Deviated Fixed Route Frequent Service	Lower, typically $0.50 to $1.00	Less Coverage	Frequent service may encourage ridership	Shorter routes mean shorter trip time, potentially less than ½ hr	Scheduled service provides higher reliability; however, route deviation can compromise reliability	Frequent, scheduled service is more convenient	Fixed route is simple to operate, but route deviation may add complexity
B. Deviated Fixed Route Infrequent Service	Lower, typically $0.50 to $1.00	Greater Coverage	Infrequent service may reduce ridership	Longer routes mean potentially longer trip time to get to desired destination	Scheduled service provides higher reliability; however, route deviation can compromise reliability	Infrequent service is less convenient	Fixed route is simple to operate, but route deviation may add complexity
C. Demand-Responsive	Higher, typically $2.00 to $3.00	Greater Coverage	Increased accessibility may encourage more ridership, especially among seniors and the disabled	Depends upon demand, but short, direct trips are likely	Reliability is dependent on demand; actual pick-up times can vary from the scheduled time when demand is greater	Door-to-door or curb-to-curb service is very convenient; however, having to schedule trips in advance is less convenient	Complex scheduling process, particularly if demand is great

ORGANIZATIONAL REQUIREMENTS

This section examines the organizational requirements for implementing public transportation service in Altavista.

Management Options

- Option 1: Contract the service out to another organization. This is also called "purchased transportation." Organizations such as RADAR (in Roanoke), Virginia Regional Transit Association (in Purcellville), or Greater Lynchburg Transit Company could operate the service
- Option 2: Directly operate the service using Town resources and facilities.

Pros and cons of each management option are given below.

	Advantages	Disadvantages
Option 1 (Purchased Transportation)	▪ Turn key operation ▪ Contractor responsible for providing all staff, running operations, maintaining equipment ▪ Easily identifiable costs ▪ Systems in place to comply with regulatory requirements (driver licensing, vehicle inspections, FTA Drug & Alcohol Testing requirements, etc.) ▪ Expertise in setting up new transit service and obtaining grants.	▪ Lack of control ▪ May be more expensive – paying for management/overhead costs in higher priced region of state ▪ Need to follow procurement regulations to select contractor ▪ May have difficulty finding a contractor willing to provide service
Option 2 (Directly Operated)	▪ Direct control of all facilities and operations ▪ May be more efficient if have resources that are currently underutilized, such as garage facilities and town management services, such as payroll and personnel ▪ May be less expensive because can share costs by using Town's existing overhead, rather than paying for it from another organization.	▪ May need more sophisticated bookkeeping to keep strict control of costs and allocate between transit and other town services ▪ May place strain on existing Town facilities if they are already at or near capacity. ▪ Liability issues

Representatives of RADAR, Greater Lynchburg Transit Company, and Virginia Regional Transit were interviewed for this feasibility study to assess the purchased

transportation option. These organizations are capable and legally permitted to provide purchased transportation, and representatives expressed interest in continuing to explore opportunities. These organizations could offer turnkey operations, where the contractor handles grant applications, regulatory requirements, heavy maintenance, human resources, and bookkeeping. The transit vehicle could be stored locally (in Altavista), the drivers would be local, and even light maintenance could be provided locally.

There are two general approaches to contracting service:

- The contractor is the grantee, in which case the contract writes the grant proposal to DRPT. The contractor would need a resolution from the Town Council endorsing the transit service. Some contactors may want the Town Council to agree to pay the local match in its resolution.
- The Town is the grantee, in which case the Town pursues funding directly with DRPT and issues a Request for Proposals to solicit bids from contractors.

It is also possible to start up service using a contractor, and then after a period of a few years once ridership has reached maturity to take over direct operations or transfer to another contractor.

Operations Staffing

If the transit service is directly operated, the Town would be responsible for providing the following staff:

- Vehicle operators – A minimum of two drivers would be needed, one as the primary and one as the backup in case of illness. It is recommended that several drivers be retained on a part-time basis to maximize scheduling flexibility. Depending on the vehicle type selected, vehicle operators may be required to have a Commercial Driver's License with Passenger Endorsement (Class P). A CDL is required if the vehicle has a capacity 16 or more passengers. It is recommended that vehicle operators be required to maintain a CDL.

- Administrative – The Town would need to provide administrative staff to handle finance, accounting, human resources, regulatory compliance, and insurance. Perhaps these tasks can be done with the existing Town staff who already perform these duties for other departments. However, it may be advisable to have a staff person responsible for public transportation administration.

- Maintenance – The Town would need to provide staff to maintain the vehicles. Existing town staff from public works department could perform this function.

If the transit service is purchased, the Town's staffing requirements would be greatly reduced. Town staff would be responsible for disbursing payments to the contracted operator. This function could be performed by existing staff.

Vehicle Purchases

As many as two vehicles would be needed to operate any of the three service alternatives under consideration. One vehicle would be the primary and the second vehicle would be the spare. The service could operate without the second vehicle; however, there would be the risk that service could be cancelled if the primary vehicle requires unexpected maintenance.

A small body-on-chassis vehicle would be suitable to meet the demand. This vehicle is also appropriate for the width of streets in the more residential parts of Altavista. Examples are shown below in Figure 6. Vehicles of this type can seat up to 18 passengers and are fully capable of loading and transporting passengers who use wheelchairs.

Figure 6: Examples of Body-on-Chassis Vehicles

If the Town of Altavista directly operates the transit service, vehicles would be purchased through DRPT. DRPT may have vehicles no longer in use by other transit properties that could be applied to public transportation service in Altavista. If Altavista were to terminate its public transportation service, the vehicle would be returned to DRPT's inventory. It is likely DRPT would purchase one new vehicle and utilize a used vehicle in its inventory as the spare.

If the purchased transportation option is selected, vehicles would be owned and operated by the contracted operator. Cost of operations and equipment leases would be paid by Altavista to the contracted operator, as negotiated. If using purchased transportation, the Town would reduce its risk associated with vehicle malfunction, as the contractor would be required to provide a replacement.

Maintenance Facility, Operations, and Procedures

The Town of Altavista operates a maintenance facility for 60 to 70 Town-owned vehicles such as those for police, solid waste management, and snow removal. The Town employs two full-time mechanics to maintain the Town's vehicle fleet. The addition of two transit vehicles to the fleet would likely not create an undue burden on existing maintenance staff.

If service is directly operated, the Town of Altavista would be responsible for providing all preventative and heavy maintenance on the transit vehicles. Heavy maintenance could be contracted to an outside company such Sonny Merryman, Inc., which has a facility located near Altavista. Preventative and light maintenance and fueling would be provided by the Public Works Department. This department would need to keep supplies and tools for maintaining the vehicles.

If service is contracted, the contractor would be responsible for providing vehicle maintenance. Heavy maintenance would be performed at the contractor's own facility (or at a third-party facility of their choosing). Preventative and light maintenance, however, could be performed either by the contractor or locally by the Public Works Department. Costs incurred by the Town in providing maintenance would be billed to the contractor.

Regulatory Requirements

Federal Department of Transportation regulations require random drug and alcohol testing for safety-sensitive employees, which at a minimum would include drivers, dispatchers, and maintenance personnel.

- 25 percent of applicable employees per year must be tested for drugs
- 10 percent of applicable employees per year must be tested for alcohol

If transit service is purchased from a contractor, all safety-sensitive employees for that contractor are in one common pool for selection for testing. The contractor would be responsible for conducting the random selection and arranging the testing.

Vehicle operators must undergo an occupational health physical examination as part of the hiring process. This requirement is associated with obtaining a Commercial Driver's License.

The Americans with Disabilities Act (ADA) requires transit vehicles be accessible to persons with disabilities. For example, the vehicle would need to be equipped with a wheelchair lift or ramp. Audible stop announcements for the visually impaired could be made by the driver.

Riders must be qualified as eligible to participate under the ADA in demand responsive service and for route deviations. These riders must submit an application and be evaluated by a physician to verify eligibility.

If the vehicle is acquired using Section 5311 Federal funds, as will be likely in the case of Altavista, then the vehicle can only be used for open door public transportation, which is to say, public transportation available to everyone. The vehicle cannot be used by other Town departments, and the vehicle cannot be chartered for special events or for specific groups. In addition, if the vehicle is sold before reaching the end of its service life, the Federal Transit Administration (FTA)

must be reimbursed the residual value of the vehicle, unless proceeds from the sale are used to purchase another transit vehicle.

There are performance reporting requirements for recipients of both state and federal funds. Recipients of FTA Section 5311 funds for rural public transportation are required to report information on their operations to the National Transit Database. Similarly, DRPT has its own performance reporting requirements.

CAPITAL AND OPERATING COST ESTIMATES

Potential Financing

DRPT offers a state Transit New Starts program to fund the first two years of new public transportation services. Funding for this program comes from a combination of FTA Section 5311 (rural and small urban areas) and state capital and formula assistance.

The application deadline for capital and operating support is February 1, 2010 for FY2011 (July 1, 2010 – June 30, 2011). The federal component of the funds would available at the earliest on October 1, 2010 for FY2011.

The first source of operating funding comes from fares. The Town will need to establish a fare policy and revenue collection procedures. Funding levels for operations — after fare revenues have been deducted from operating expenses — are typically:

- Federal: 50 percent
- State: 16-17 percent
- Local: 33-34 percent

Eligible capital expenses include the cost of transit vehicles, associated capital equipment such as spare parts and shop equipment, the shop facility, and support vehicles. Funding levels for capital costs are typically:

- Federal: 80 percent
- State: 10 percent
- Local: 10 percent

It should be noted that the state contribution can vary significantly from year to year. Also, DRPT requires that the local contribution be maintained year after year.

The grant application process is managed through DRPT's Online Grant Administration system (OLGA). DRPT offers training and assistance in using OLGA.

Capital Cost

Capital costs included in the estimate are for transit vehicles and spare parts. As the Town of Altavista already has a shop facility for vehicle maintenance, no capital costs are included for this facility. Also, with a small transit operation as contemplated here, there is no need for support vehicles.

DRPT transit service guidelines estimate the cost for a body-on-chassis vehicle in the range of $40,000 to $65,000. A mid-range value of $50,000 is used in the present estimate. In addition, spare parts were estimated at 10 percent of the cost of one vehicle.

The capital cost estimate is shown in Table 6 below.

Table 6: Capital Cost Estimate

Transit Service Alternative				Contribution		
	Vehicle Cost	Spare Parts	Capital Cost	Federal 80%	State 10%	Local 10%
Option A	$100,000	$5,000	$105,000	$84,000	$10,500	$10,500
Option B	$100,000	$5,000	$105,000	$84,000	$10,500	$10,500
Option C	$100,000	$5,000	$105,000	$84,000	$10,500	$10,500

Operating Cost

Operating costs include labor, maintenance, consumable supplies (such as fuel and tires), and administration. The National Transit Database was researched to estimate operating costs, referencing small systems in Virginia and adjacent states operating fixed route and demand responsive transit service. Systems with directly operated and with purchased transportation were both referenced. Operating costs are typically expressed in terms of a per vehicle-revenue-hour basis or per vehicle-revenue-mile basis. It was found that the per vehicle-revenue-hour basis was a more conservative approach. A value of $60 per vehicle-revenue-hour is used in this cost estimate.

Operating costs are offset by farebox return as well as local, state, and federal operating support. Farebox return has been estimated using a fare of $0.50 for the deviated fixed route options and a fare of $2.00 for the demand responsive alternative. First year ridership has been estimated based on ridership achieved in similar but mature systems (such as in Blackstone, VA, Carroll County, MD, and Cary, NC) and then scaled back. It should be noted that farebox return covers only a small portion of operating costs, and so inaccuracies in ridership estimation have little effect on the estimate of needed operating support.

The annual operating cost estimate is shown in Table 7 below.

Table 7: Annual Operating Cost Estimate

Transit Service Alternative	Annual Revenue Hours	Cost per Hour	Annual Operating Cost	Estimated Farebox	Operating Deficit	Contribution		
						Federal 50%	State 15%	Local 35%
Option A	2080	$60	$124,800	$2,400	$122,400	$61,200	$18,360	$42,840
Option B	2340	$60	$140,400	$2,400	$138,000	$69,000	$20,700	$48,300
Option C	2080	$60	$124,800	$4,800	$120,000	$60,000	$18,000	$42,000

RECOMMENDATION

Initial Service

All three options described above are feasible in terms of meeting the unmet transportation needs in the Town of Altavista. They all increase access to transportation, particularly for the significant portion of the population who are elderly or disabled. They also all use access to transportation to further economic development goals of supporting local retail.

This study recommends an initial service following Option A: Deviated Fixed Route with Frequent Service. This option offers more trips per day than Option B, increasing convenience and attractiveness. It concentrates the service area within the Town of Altavista where more riders are likely to be. The service could be operated either as a loop running once per hour, or alternating between two branches. As implementation planning progresses, and even after beginning service, the route can be modified to serve the locations generating regular riders. Given the conservative estimate of operating speed, the route could be lengthened while still maintaining hourly service.

It is recommended that the Town adopt a route deviation policy that balances broadening access to the most potential riders while discouraging excessive deviations that could slow down operations. For example, a passenger eligible under the ADA for paratransit service could request a route deviation at no additional charge. However, ineligible riders would be charged an additional fare for route deviation.[1]

The estimated costs for the recommended alternative are shown in Table 8.

[1] Based on discussions with transit service providers, a number of route deviation policies are being used in Virginia. The recommended policy above is similar to one in use on the OmniRide local bus system in Prince William County.

Table 8: Estimated Capital and Operating Costs of the Recommended Alternative

		Contribution			
	Cost	Farebox	Federal	State	Local
Option A – Capital	$105,000	N/A	$84,000	$10,500	$10,500
Option A – Annual Operations	$124,400	$2,400	$61,200	$18,360	$42,840

Service Expansion

After operating the service for one year, if ridership builds, the system could be expanded to serve two round trips per day to Lynchburg. The first trip would leave Altavista at 7:00 a.m., serve The Plaza transit hub, and return to Altavista at 9:00 a.m. A similar Lynchburg trip would be made from 5:00 p.m. to 7:00 p.m., or at a time when demand most warrants.

Should ridership grow even further, the system could be expanded to include the three loops shown in Option B, but with hourly service on each loop and with each loop having its own vehicle.

Fall Back Position

In the event that after a year of service ridership has not materialized, either Option B or Option C could be implemented. Option B – Deviated Fixed Route with Infrequent Service – would attempt to build ridership by broadening the service area. By broadening the service area, the Town has the opportunity to invite additional partners to support the local contribution toward capital and operating costs. While the Town of Altavista would likely contribute the largest amount, Campbell County, Pittsylvania County, and the Town of Hurt could also support the service. Option C – Demand Responsive – would involve reducing service to only those people with the greatest need. Neither Option B nor Option C would substantially change the operating cost of the system.

Service Provider

It is recommended that the Town contract with an external transit service provider such as RADAR, Virginia Regional Transit, or Greater Lynchburg Transit. While this arrangement is likely to cost more, it would unburden Town staff from managing human resources issues, regulatory compliance, and vehicle maintenance. The contract could also provide support through the grant application process as well. After the system has operated for a few years and ridership is established, the Town could take over directly operating the service and no longer use a contractor.

Transit Supportive Development

Given that capital and operating costs of transit service requires public subsidy, it is important for land development patterns to support higher transit usage. Most

commonly accepted measures of transit supportiveness, such as population density, are geared toward urban areas. Nonetheless, some factors are applicable to rural areas and small towns. As redevelopment occurs in Altavista, planners can keep in mind these factors that support higher transit use.

- Concentration of employment. At present, Altavista has a concentration of retail employment along Main Street and Broad Street. Much of the Town's manufacturing employment is concentrated along the Norfolk Southern rail line and the Roanoke River. As redevelopment occurs, the Town could encourage re-using or constructing new employment centers in these already developed areas.

- Mix of use in the central business district. The presence of a variety of shops, offices, and civic uses in the CBD encourages people with different trip purposes to come to one location that is readily accessible by transit. The Town could consider increasing the amount of housing permitted in a near the CBD.

- Facilitate pedestrian and bicycle access. Over time, constructing sidewalks along the residential streets in Altavista would make it easier and safer to access transit stops. It would also encourage more walking and bicycling, so that people recognize they don't need to use a car for all trips.

- Increase the price of parking. The presence of parking meters on the streets and in public parking lots in CBD would encourage transit use over driving, as well as generate revenues for public space improvements. However, the pricing of parking would need to be weighed carefully so that customers are not encouraged to shop outside the CBD.